	Application No.	Applicant(s)
Notice of Allowability	10/622,627	GREEN ET AL.
	Examiner	Art Unit
	Linh M. Nguyen	2816
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to <u>amendment filed 11/22/2004</u> .		
2. The allowed claim(s) is/are <u>1-22</u> .		
3. The drawings filed on 17 July 2003 are accepted by the Examiner.		
<ul> <li>4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
6. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.		
(a) 🔲 including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1)  hereto or 2)  to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date	6. ☐ Interview Summary Paper No./Mail Dat 8), 7. ☐ Examiner's Amendo	e .

Art Unit: 2816

## **DETAILED ACTION**

This is a reply to the Applicant's amendment submitted on 11/22/2004. By virtue of this amendment, claim 22 is newly added; and thus, claims 1-22 are currently presented in the instant application.

## Allowable Subject Matter

1. Claims 1-22 are allowed.

## Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance:

The closest prior art fails to disclose or fairly suggest:

- a) A method including a step of designating a cycle period of a first clock signal as valid when a single rising edge of a second clock signal and a single falling edge of the second clock signal are detected during the cycle period of the first clock signal, in combination with the remaining claimed limitations, as called for in claims 1, 5 and 6; or
- b) A circuit including a valid cycle detector that receives a first clock signal and a second clock signal and outputs a valid cycle signal, the valid cycle detector asserting the valid cycle signal when the valid cycle detector detects a single rising edge of the second clock signal and a single falling edge of the second clock signal during a cycle period of the first clock signal, in combination with the remaining claimed limitations, as called for in claim 9, or
- c) A circuit including a lock detection circuit generating a valid cycle signal having a first value when exactly one rising edge and exactly one falling edge is counted and having a second value when another number of rising edges and falling edges is counted, in combination with the remaining claimed limitations, as called for in claim 19; or

Art Unit: 2816

d) A circuit including means for detecting that a feedback clock signal and a reference clock signal are out of lock when a like number of feedback clock cycles and reference clock cycles occur during a time period and when a single rising edge and a single falling edge of the feedback clock signal are detected during less than a predetermined number of the reference clock cycles during the time period, in combination with the remaining claimed limitations, as called for in claim 20, or

- e) A circuit including means for means for outputting a lock signal when a number of consecutive valid cycles of the reference clock signal exceeds a predetermined number in combination with the remaining claimed limitations, as called for in claim 21; or
- f) A circuit including means for detecting that a feedback clock signal and a reference clock signal are out of lock when a like number of feedback clock cycles and reference clock cycles occur during a time period and when two rising edges of the feedback clock signal are detected during less than a predetermined number of the reference clock cycles during the time period, in combination with the remaining claimed limitations, as called for in claim 22.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh M. Nguyen whose telephone number is (571) 272-1749.

The examiner can normally be reached on Alternate Fri, Monday - Thursday from 7:00 to 4:30.

Art Unit: 2816

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Linh M. Nguyen Primary Examiner Art Unit 2816

**LMN**